

Del Oro Water Company – River Island District 2012-2013 Meter Exchange Program

Del Oro Water Company addresses, on an every other year basis, system-wide improvements due either to aging infrastructure or the addition/upgrading of systems in order to ensure a more efficient, accurate, and safe delivery of your water supply. In the 2012/2013 fiscal period, Del Oro continues to undertake a state wide Meter Exchange Program which includes River Island District.

Del Oro recently contracted Utility Services Associates (USA) to survey River Island District, as the area was experiencing consistently high amounts of unexplainable water loss. The survey found only a few small mainline leaks, which have been repaired. The survey's major finding was that significant loss was occurring at customer meters throughout the District. Further testing has indicated that some meters are registering less than the total volume of water actually passing through them. Tested meters registered anywhere from 90% to a mere 3% of water passing through the meter. In some cases, this is due to wear/use. In others, it is because the volume of water passing through the meter exceeds the flow rate that can be accurately recorded by the meter. A quote from Badger Meter is included at the end of this notice as well as CPUC General Order 103 referencing meter accuracy.

Therefore, meters are being replaced for the following reasons:

- System wide high amounts of unexplainable consistent water loss.
- USA Leak Detection Survey results showing that there is a significant water loss at the individual meters.
- USA also determining that, based on the sound detection results at the meters, water was passing through meters at higher than 15 gpm, which is the threshold for accuracy for a 5/8x3/4 inch meters.
- Sample meters that were tested showing results of tracking usage from as little as 3% to as high as 90%. The utility therefore is showing a loss of delivery from 97% to 10% of total water pumped.

Customers receiving these upgrades will continue to be charged the basic Readiness to Serve Charge for a 5/8x3/4 inch meter. If a customer currently is on a 5/8x3/4 rate, they will remain on that rate (subject to CPUC concurrence). All rates are subject to change over time; however, the 5/8x3/4 charge will be the one applied to customers who are converted to a 1" meter unless they are currently paying the 1" rate. Please note - Customers subscribe to a rate, not a meter size.

A complete analysis of River Island District's consumption will be undertaken throughout the next 8 to 12 months, after which time the current rate structure will be reviewed. River Island customers will be invited to a public meeting prior to any potential action by the utility, in accordance with the California Public Utilities Commission review procedures.

BADGER METER'S POSITION: As explained by a representative of Badger Meter:

*A meter is designed for 3 specific flow criteria; low flow, maximum continuous operation, and typical operating range. Every meter is tested for low flow accuracy and typical operating range before it leaves the factory [...] Badger Meter provides a 15 year accuracy warranty when the meters are used within these flow ranges. If the meters are used [in] installations where demand exceeds these flow guidelines, the meter will not measure accurately. Take, for example, installing a Model 25 [accurate up to 15 gpm] in an environment that typically draws flow rates of 35-50 gpm. The nutating disc in the measuring element will spin very fast. The magnet will turn and the register gearing may not keep pace, causing the register to **under report** the volume actually passing through the meter. The excessive turns (or nutations) will cause the measuring element to wear out prematurely. We often use the analogy of tires on a car. If the tires are too small, they wear out faster because they are turning more often. The general overworking of the meter will eventually wear out the meter completely at all flow ranges.*

GENERAL ORDER 103-A EXCERPT: The California Public Utilities Commission (CPUC) requires that all water utilities accurately meter water use, as described in General Order 103-A, section IV.3 “Accuracy Requirements Of Water Meters”:

A. General

All meters used for measuring quantities of water delivered to customers shall be in good mechanical condition, shall be adequate in size and designed for the type of service measured and shall be accurate to within generally accepted standards. The standards of accuracy for meters are set forth in paragraphs B and C, following.

B. Test Flows

For determination of minimum test flow and normal test flow limits, the Commission adopts as a guide the appropriate standard specifications of the applicable AWWA standard (M6 or its successor.) [...]

C. Determination of Accuracy

(1) Meters shall be tested at three or more test flows per the applicable AWWA standard (M6 or its successor):

(2) A meter shall not be placed in service unless the meter test meets or exceeds the applicable AWWA standard (M6 or its successor)

The Meter Exchange Program will continue for several months, until all meters and properties have been surveyed and all appropriate meter exchanges have been completed. If you have any further questions regarding this exchange, please contact Del Oro’s Customer Care Center River Island line at (530) 809-3982 or email us at CommunityRelations@delorowater.com

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